



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# **FY14 Budget Overview for Clean Up Caucus**

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# The EM Cleanup Program: What We Do, How We Do It, and Why

EM's mission is to clean up hazardous or potentially hazardous radioactive and other substances, much of which were generated in connection with the early days of the Nation's atomic energy defense activities.

EM is building on past successes to complete ambitious remediation projects and treatment facilities.



EM operates one-of-a-kind nuclear facilities to manage high-level radioactive waste and dispose of materials like plutonium.

EM cleanup addresses the environmental legacy of America's nuclear weapons research and production complex.



# Where Does Each Dollar of Funding Go?

## Funding by EM Mission Area in FY 2014

### Radioactive Tank Waste

\$ 1,933M / 34%

Special Nuclear  
Materials and Used  
Nuclear Fuel\*\*  
\$ 906M / 16%

Soil and  
Groundwater  
\$ 492M / 9%



Facility D&D  
\$ 1,095M / 19%

Transuranic &  
Solid Waste  
\$ 804M / 14%

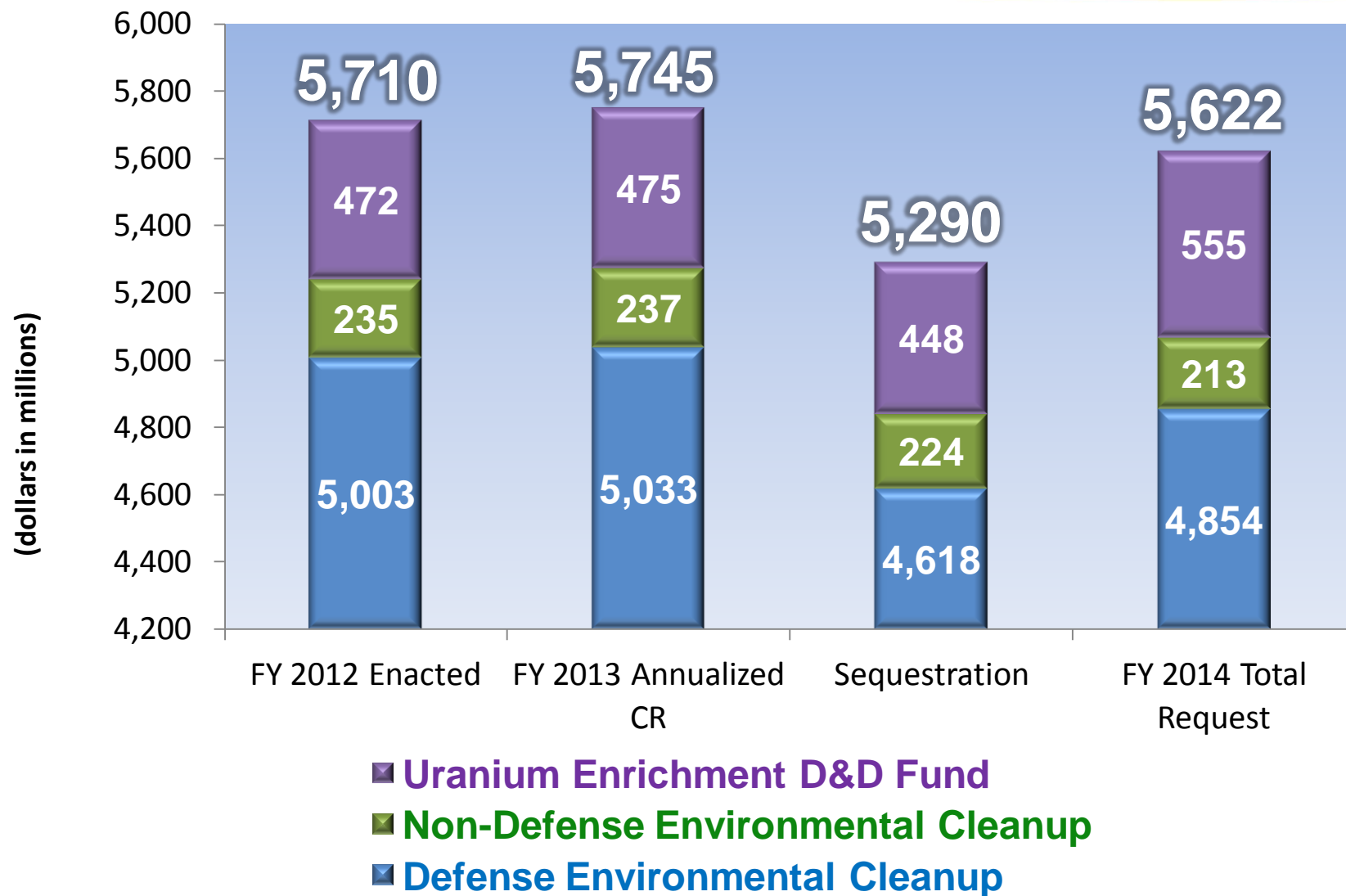
Essential Site  
Services\*  
\$ 392M / 7%

\*Includes Program Direction, Program Support, TDD, Post Closure Administration and Community and Regulatory Support

\*\*Includes Safeguards and Security

Percentages do not add to 100% due to rounding

# EM Funding Levels: FY 2012 – FY 2014 (\$M)

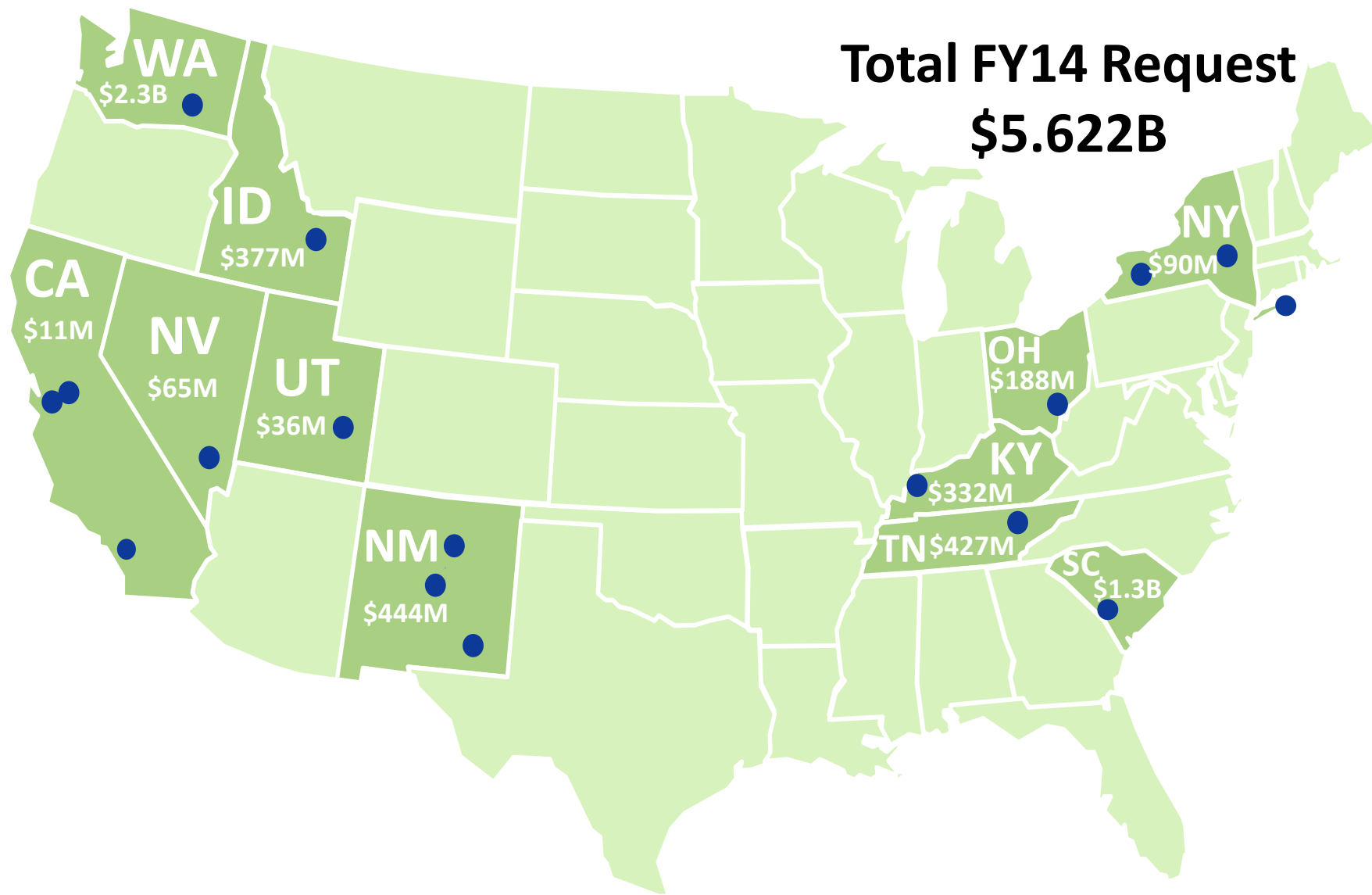


# EM's FY 2014 Budget Request: Funding by Appropriation (\$M)

Appropriation	FY 2012 Enacted	FY 2013 Annualized CR	FY 2013 Sequester	FY 2014 Request	\$ Change vs. FY 2012	% Change vs. FY 2012
Defense Environmental Cleanup	5,006	5,037	4,618	5,317	311	6.2%
Non-Defense Environmental Cleanup	235	237	224	213	(22)	-9.4%
Uranium Enrichment D&D Fund	472	475	449	555	83	17.6%
Subtotal, EM	5,713	5,749	5,290	6,085	372	6.5%
<i>UED&amp;D Fund Offset:*</i>	-	-	-	(463)	(463)	100.0%
<i>Defense Prior Year Offset:</i>	(3)	(3)	-	-	3	-100.0%
<b>Total, EM</b>	<b>5,710</b>	<b>5,745</b>	<b>5,290</b>	<b>5,622</b>	<b>(88)</b>	<b>-1.5%</b>

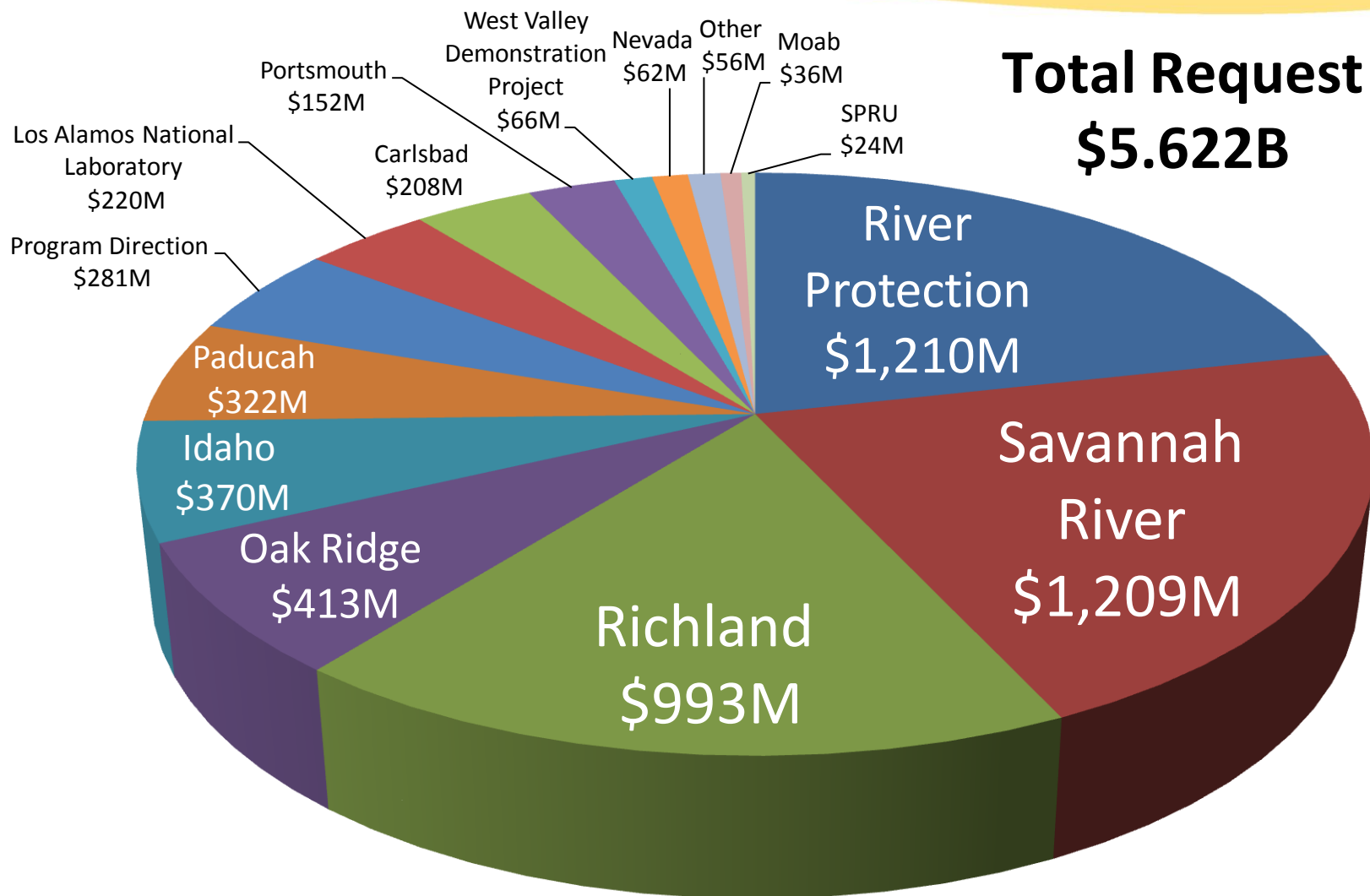
\* Reflects Administration's proposal to reauthorize contributions to the Uranium Enrichment Decontamination and Decommissioning Fund

# EM's FY 2014 Budget Request: Funding by State





# EM's FY 2014 Budget Request: Funding by Site



After 25 years of cleanup progress, the EM program's challenges have changed significantly. In response to this changing environment, EM must take the opportunity to strategically refocus our cleanup program, maximizing all of our resources to best serve the American people.

## Key Challenges Facing EM

- ❖ Along with other federal programs, EM is facing an **uncertain fiscal environment**.
- ❖ Major **technical challenges** have emerged, particularly for large construction projects.

## The Path Forward

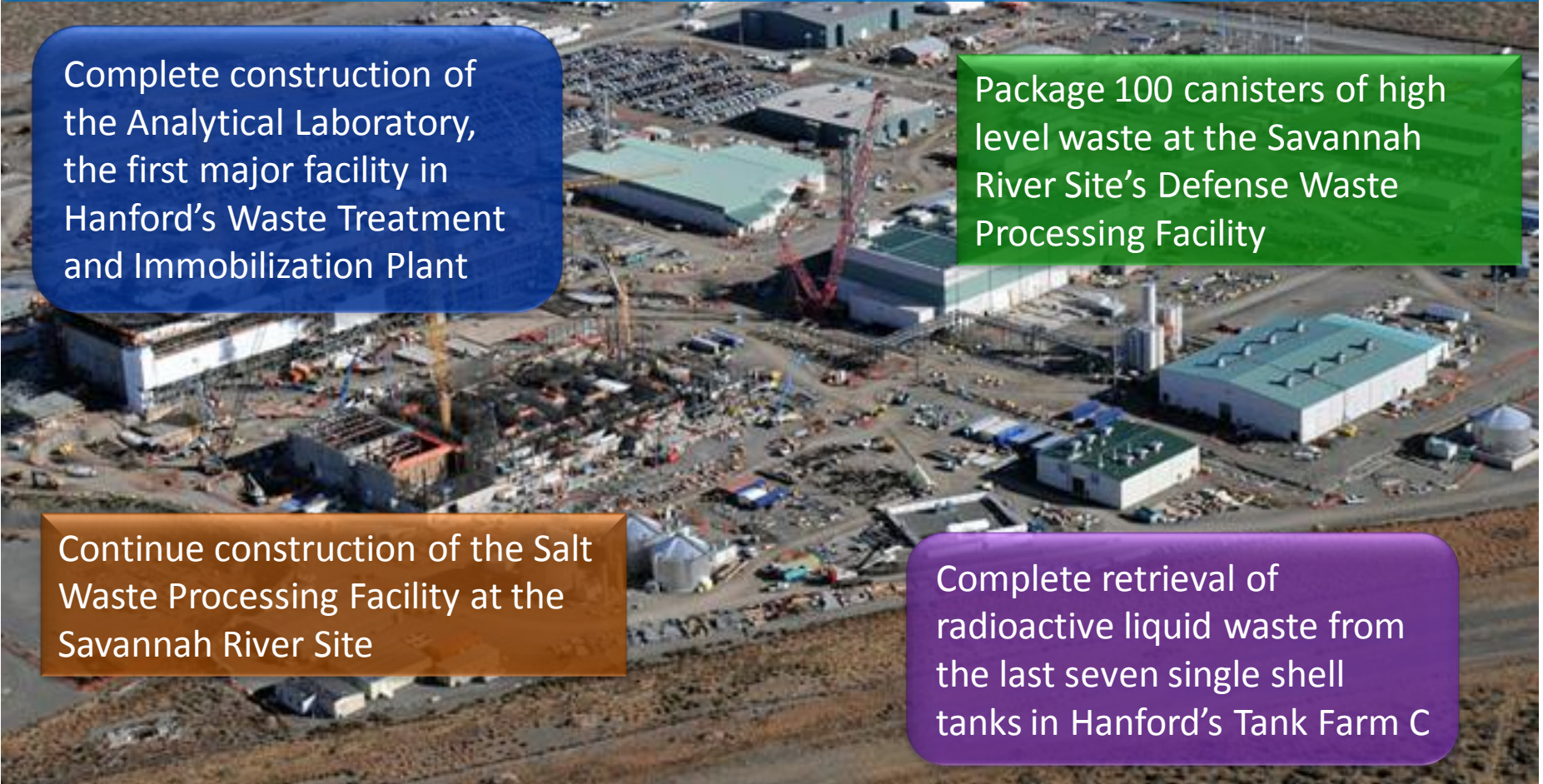
- ❖ Partner with regulators, tribal nations and other stakeholders to **align cleanup priorities** and commitments with expected performance and funding levels.
- ❖ In close consultation with stakeholders, work to **optimize existing waste disposal** processes and systems.
- ❖ Improve project and contract **management**.
- ❖ Invest in **targeted, applied technology** development in areas where cleanup depends on the use of new technologies and where innovative technologies can reduce the risk and cost of cleanup.



# Radioactive Liquid Waste in FY 2014

FY 2014 Funding: \$1,933M (34% of EM Total)

## Key Liquid Tank Waste Accomplishments Planned for FY 2014



Complete construction of the Analytical Laboratory, the first major facility in Hanford's Waste Treatment and Immobilization Plant

Package 100 canisters of high level waste at the Savannah River Site's Defense Waste Processing Facility

Continue construction of the Salt Waste Processing Facility at the Savannah River Site

Complete retrieval of radioactive liquid waste from the last seven single shell tanks in Hanford's Tank Farm C

*Waste Treatment and Immobilization Plant – Richland, WA*



# Facility Decommissioning in FY 2014

FY 2014 Funding: \$1,095M (19% of EM Total)

## Key Facility Decommissioning Accomplishments Planned for FY 2014

Complete deactivation and decommissioning of 36 nuclear, radioactive and industrial facilities across the country

Initiate decontamination and decommissioning of two key contaminated EM facilities: Oak Ridge's K-27 Building and Richland's Building 324



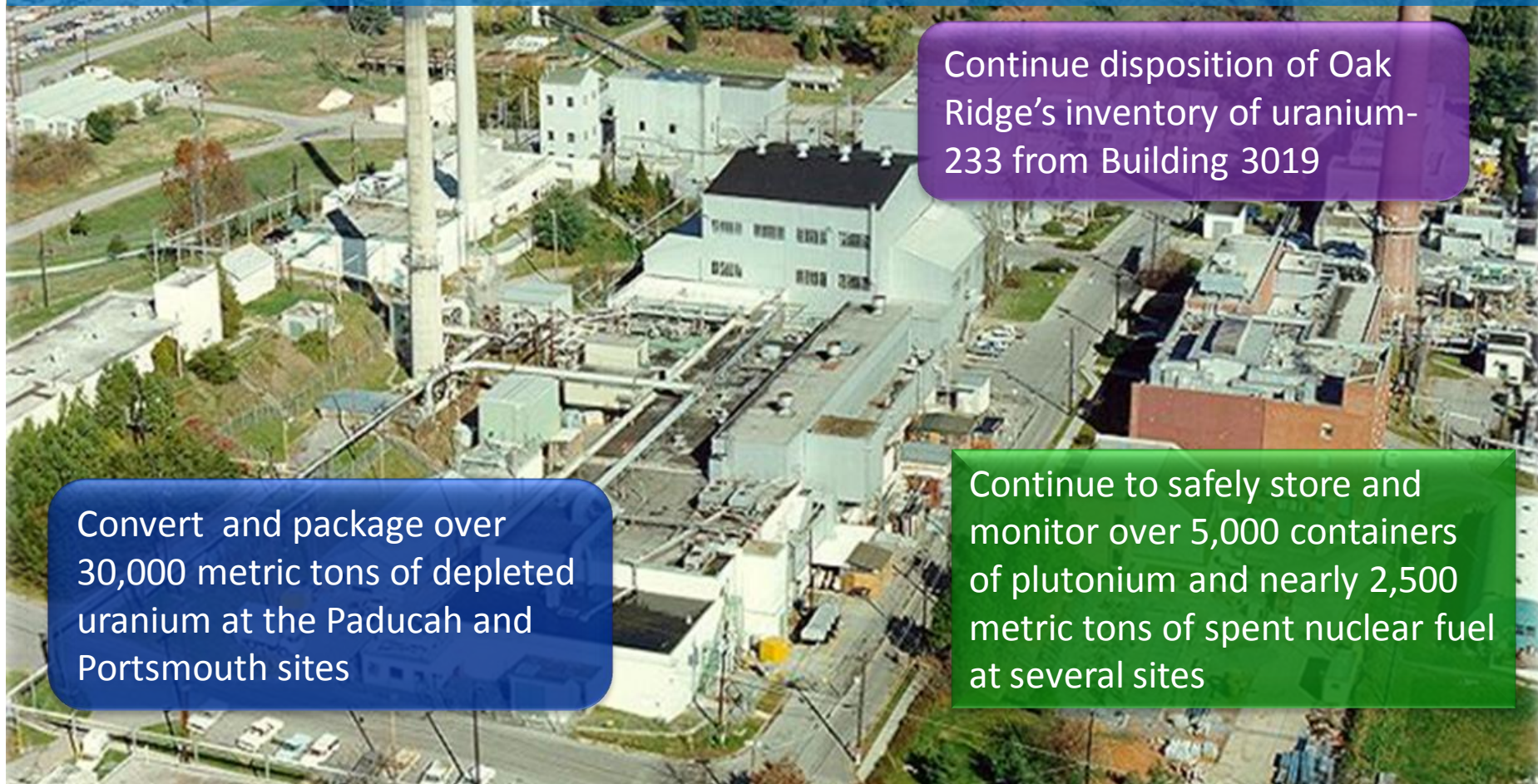
K-25 Facility – Oak Ridge, TN



# Nuclear Materials and Used Fuel in FY 2014

FY 2014 Funding: \$906M (16% of EM Total)

## Key NM and UNF Accomplishments Planned for FY 2014



Continue disposition of Oak Ridge's inventory of uranium-233 from Building 3019

Convert and package over 30,000 metric tons of depleted uranium at the Paducah and Portsmouth sites

Continue to safely store and monitor over 5,000 containers of plutonium and nearly 2,500 metric tons of spent nuclear fuel at several sites

*Building 3019 – Oak Ridge, TN*



# Transuranic Waste in FY 2014

FY 2014 Funding: \$804M (14% of EM Total)

## Key Transuranic Waste Accomplishments Planned for FY 2014

Support progress toward completion of processing and removal of 3,706 cubic meters of combustible, above-ground transuranic waste at the Los Alamos National Laboratory

Provide transportation services for shipments of transuranic waste to WIPP

Disposition transuranic waste from inventory



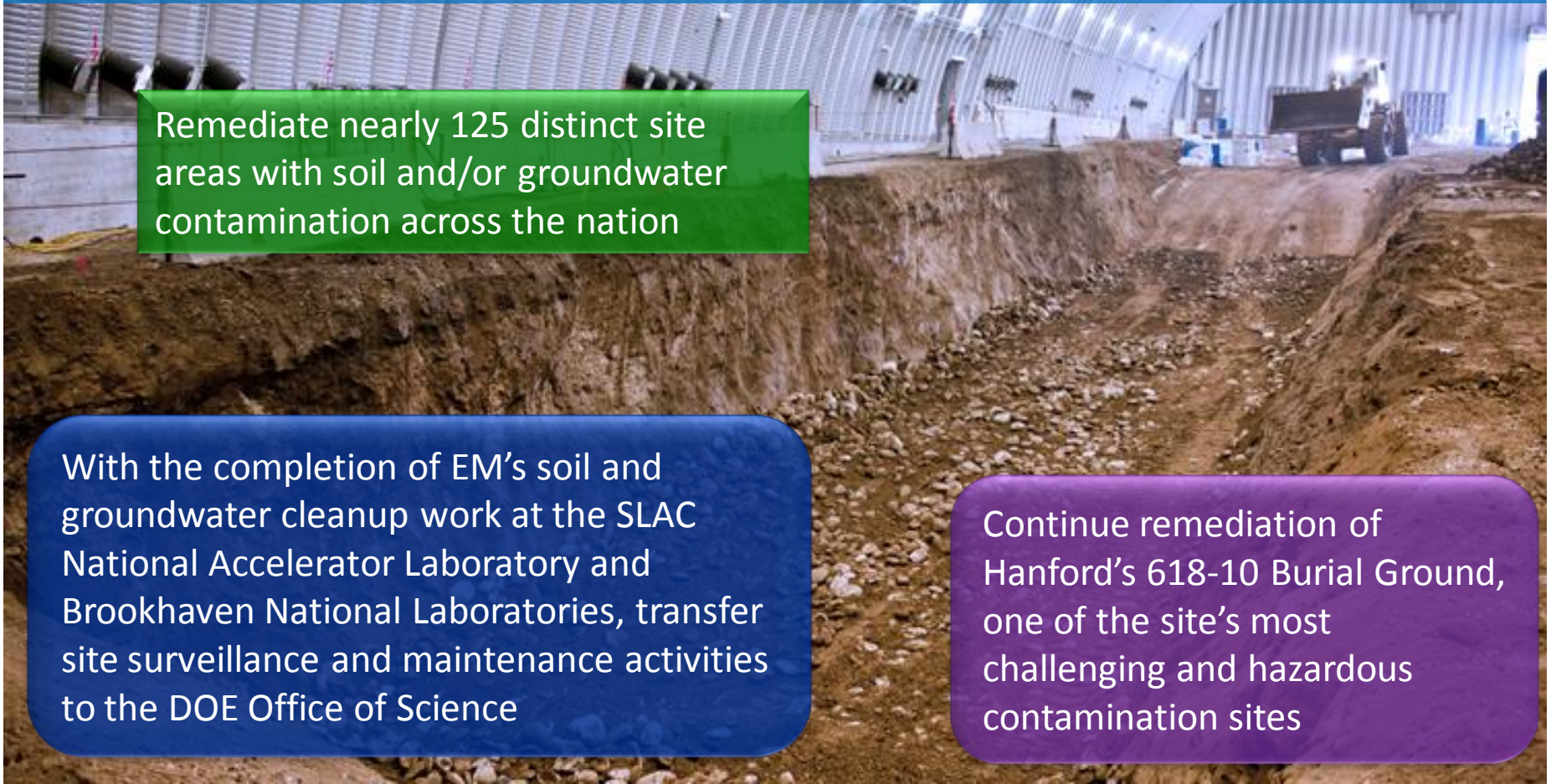
*Waste Isolation Pilot Plant – Carlsbad, NM*



# Soil and Groundwater in FY 2014

FY 2014 Funding: \$492M (9% of EM Total)

## Key Soil and Groundwater Accomplishments Planned for FY 2014



Remediate nearly 125 distinct site areas with soil and/or groundwater contamination across the nation

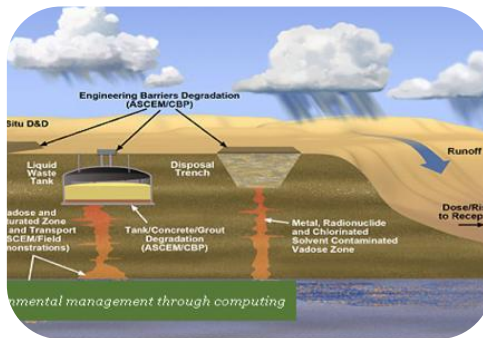
With the completion of EM's soil and groundwater cleanup work at the SLAC National Accelerator Laboratory and Brookhaven National Laboratories, transfer site surveillance and maintenance activities to the DOE Office of Science

Continue remediation of Hanford's 618-10 Burial Ground, one of the site's most challenging and hazardous contamination sites

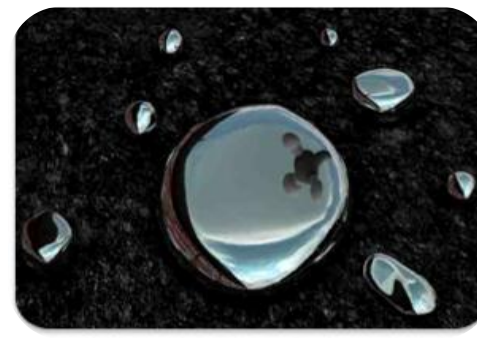
*Material Disposal Area – Los Alamos, NM*



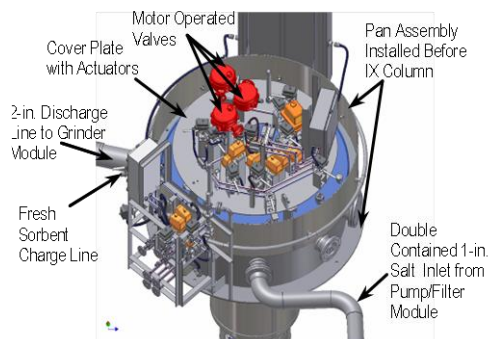
Maximizing waste  
loading in glass



Groundwater  
modeling



Mercury  
remediation



Separations  
technologies



# Savannah River Site

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	1,187,782	1,088,261	(99,521)
Safeguard & Security	129,140	121,196	(7,944)
<b>Total, Savannah River</b>	<b>1,316,922</b>	<b>1,209,457</b>	<b>(107,465)</b>

## Radioactive Tank Waste Stabilization and Disposition

\$644,560 (-\$182,992)

SR-0014C

- Package 100 canisters at the Defense Waste Processing Facility
- Continue waste removal activities in support of sludge and salt batch preparation to feed DWPF
- Continue construction of Salt Waste Processing Facility
- Operate Actinide Removal Process and Module Caustic Side Solvent Extraction at planned rates
- Continue closure activities for Tanks 5 and 6

## Special Nuclear Material Consolidation, Processing, and Disposition

\$393,196 (+\$42,952)

SR-0011C  
SR-0020

- Complete processing at-risk Sodium Reactor Experimental vulnerable fuel and initiate processing of other aluminum-clad UNF and Canadian liquid HEU
- Perform risk-reduction activities in 235-F as committed in Defense Nuclear Safety Board Recommendation 2012-1
- Continue safeguard and security activities

## Transuranic and Mixed / Low-Level Waste Disposition

\$60,369 (+\$15,093)

SR-0013

- Store and ship non-Moxable plutonium to the Waste Isolation Pilot Plant
- Continue processing of low-level/mixed low-level waste and disposal operations in E Area

## Soil and Groundwater Remediation

\$55,438 (+\$12,284)

SR-0030

- Operate soil and groundwater remedial systems to protect human health and the environment
- Monitor groundwater and streams consistent with regulator requirements to demonstrate remedial systems' effectiveness

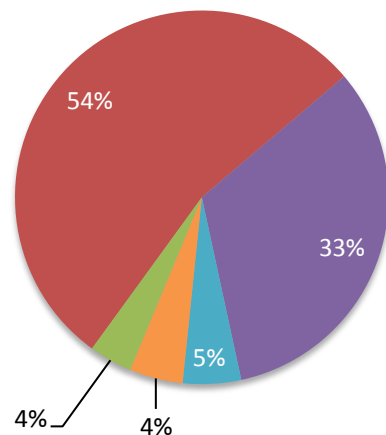
## Spent Nuclear Fuel

\$44,684 (+\$3,572)

SR-0012

- Continue receipt of Foreign Research Reactor / Domestic Research Reactor spent (used) fuel and safe storage in L Basin

Site Infrastructure / Program Support  
(Community and Regulatory activities) -  
\$11,210



# River Protection

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	1,182,010	1,210,216	28,206
<i>Tank Farms</i>	<i>442,010</i>	<i>520,216</i>	<i>78,206</i>
<i>Waste Treatment Plant</i>	<i>740,000</i>	<i>690,000</i>	<i>(50,000)</i>

## Radioactive Tank Waste Stabilization and Disposition

\$1,210,216 (\$28,206)

ORP-0060

- Waste Treatment and Immobilization Plant (Re-Baselining Effort is in progress)
  - Continue construction of Low Activity Waste and Balance of Facilities, and complete construction of Analytical Laboratory
  - Continue activities for the Design Completion Team to resolve WTP technical issues to allow for full resumption of HLW construction by the end of 2014
  - Initiate commissioning of Balance of Facilities and the Analytical Laboratory at WTP

ORP-0014

- Radioactive Liquid Tank Waste Stabilization and Disposition - Tank Farms
  - Operate the 222-S laboratory and 242-A evaporator to support SST retrievals and to maintain available DST space
  - Continue C Farm retrieval activities in order to complete all retrievals by the end of 2014
  - Continue AY/AZ Farm ventilation system upgrades and Feed Deliver System activities

100%



# Richland

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	950,043	921,785	(28,258)
Non-Defense Environmental Cleanup	2,703	2,545	(158)
Subtotal, Richland	952,746	924,330	(28,416)
Safeguard and Security	69,078	69,078	0
<b>Total, Richland</b>	<b>1,021,824</b>	<b>993,408</b>	<b>(28,416)</b>

## Excess Facilities Deactivation and Decommissioning

\$396,179 (+\$8,307)

- RL-0040 Provide site-wide services for RL and ORP operations, as well as necessary site infrastructure upgrades, replacements and repairs
- RL-0041 Continue remediation of the 618-10 burial ground and continue remediation of the other waste sites along the Columbia River
- RL-0042 Initiate deactivation, decontamination, decommissioning and demolition of the high risk Building 324 and remediation of the soil underneath

## Special Nuclear Material Consolidation, Processing, and Disposition

\$211,968 (+\$43,695)

- RL-0011 Continue deactivation and decommissioning of facilities in the Plutonium Finishing Plant complex
- RL-0020 Continue to deactivate and prepare for dismantlement the above grade portions of 234-5Z, 243-Z and other facilities
- Continue to maintain compliant safeguard and security programs and protection of SNM for the Hanford Site

## Soil and Groundwater Remediation

\$141,720 (-\$48,985)

- RL-0030 Support efforts toward final Record of Decision for the 100 and 200 Areas

## Transuranic and Mixed / Low-Level Waste Disposition

\$130,322 (-\$13,160)

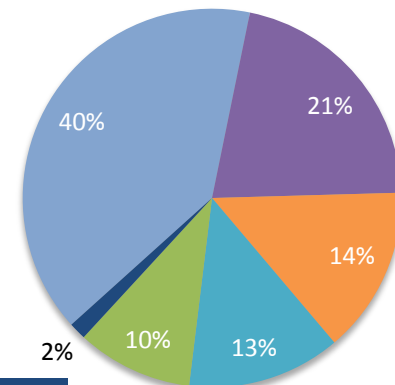
- RL-0013C Treat and dispose of liquid waste from site generators and dispose treated liquid effluents from the 200 Area Liquid Effluent Facility

## Spent Nuclear Fuel

\$98,518 (-\$13,434)

- RL-0012 Complete testing and operational readiness reviews of containerized sludge equipment in the K-West Basin

Site Infrastructure / Program Support (Community and Regulatory Activities) - \$14,701



# Oak Ridge

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	198,409	193,936	(4,473)
Uranium Enrichment D&D	200,856	195,990	(4,866)
Subtotal, Oak Ridge	399,265	389,926	(9,339)
Safeguard and Security	20,493	18,800	(1,693)
Technology Development	0	4,091	4,091
<b>Total, Oak Ridge</b>	<b>419,758</b>	<b>412,817</b>	<b>(6,941)</b>

## Excess Facilities Deactivation and Decommissioning

\$250,780 (-\$5,376)

- OR-0040
- OR-0041
- OR-0042
- OR-0043
- Continue high-risk equipment removal in the Building K-25 East Wing Tc-99 area and continue K-27 deactivation and characterization activities
- Continue operations of liquid, gaseous and process waste systems at Oak Ridge National Laboratory
- Perform surveillance and maintenance of the Centrifuge Facilities complex

## Transuranic and Mixed/Low-Level Waste Disposition

\$115,855 (+\$34,955)

- OR-0013B
- Continue processing and disposal of contact-handled and remote-handled transuranic waste to meet regulatory milestones
- Continue Sludge Build-out Project Design at TRU Waste Processing Center for sludge disposition
- Continue shipments of Consolidated Edison Uranium Solidification Project material from the uranium-233 inventory in Building 3019A to offsite disposal
- Continue transfers of transuranic waste to the TRU Waste Processing Center located at the Oak Ridge National Laboratory
- Continue planning and readiness activities for processing the remaining uranium-233 in Building 2026

## Special Nuclear Material Consolidation, Processing, and Disposition

\$18,800 (-\$38,693)

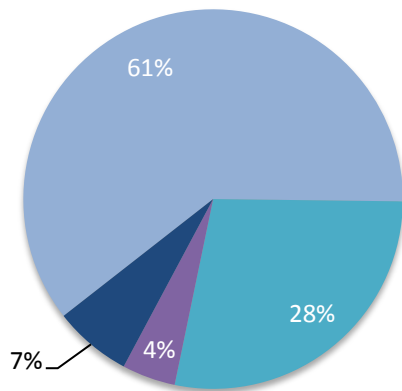
- OR-0011Z
- OR-0020
- Transferred the Uranium-233 disposition activities to PBS OR-0013B
- Continue safeguard and security activities

## Technology Development

\$4,091 (+\$4,091)

- OR-TD-0100
- Develop and demonstrate strategies to reduce the volume and provide cost-effective treatment for on-site disposal of mercury-contaminated building debris

Site Infrastructure / Program Support  
Community and Regulatory Activities - \$23,291  
Technology Development - \$4,091



# Idaho

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	384,669	365,010	(19,659)
Non-Defense Environmental Cleanup	5,131	5,000	(131)
<b>Total, Idaho</b>	<b>389,800</b>	<b>370,010</b>	<b>(19,790)</b>

## Transuranic and Mixed / Low-Level Waste Disposition

\$174,000 (+\$17,468)

ID-0013

- Process and ship approximately 4,500 cubic meters of contact-handled transuranic waste to the Waste Isolation Pilot Plant
- Repackage and characterize remote-handled transuranic waste for shipment to the Waste Isolation Pilot Plant
- Continue disposition of mixed low-level and low-level waste
- Process and ship remote-handled TRU Waste for shipment to the Waste Isolation Pilot Plant

## Soil and Groundwater Remediation

\$97,000 (-\$1,682)

ID-0030B

- Continue retrieval, processing, and disposition of buried targeted waste

## Radioactive Tank Waste Stabilization and Disposition

\$78,600 (-\$36,964)

OR-0014B

- Continue sodium-bearing waste treatment operations
- Maintain tank farm and systems for delivery of sodium-bearing waste until treatment is complete

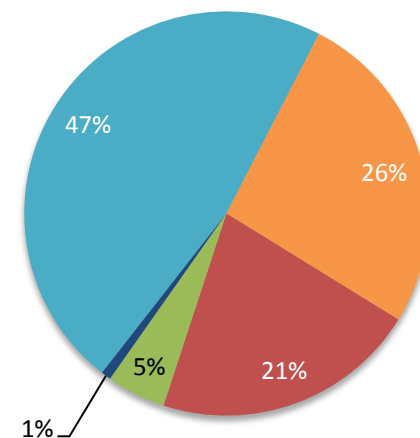
## Spent Nuclear Fuel

\$17,500 (+\$2,578)

ID-0012B-N  
ID-0012B-D

- Provide security for Fort St. Vrain fuel and continue safe and secure storage of DOE's fuel inventory

FY 2014 budget supports significant progress toward cleanup completion



Site Infrastructure / Program Support  
(Community and Regulatory activities) -  
\$2,910

# Carlsbad

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	213,334	203,390	(9,944)
Safeguard and Security	4,845	4,977	132
<b>Total, Carlsbad</b>	<b>218,179</b>	<b>208,367</b>	<b>(9,812)</b>

## Transuranic and Mixed/Low-Level Waste Disposition

\$203,390 (-\$9,944)

CB-0080  
CB-0081  
CB-0090

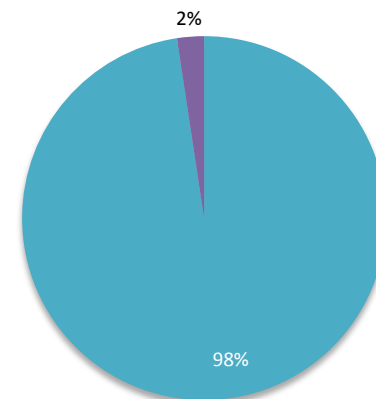
- Support transport and disposal of remote-handled and contact-handled waste at the Waste Isolation Pilot Plant
- Continue Central Characterization Project for transuranic waste at Los Alamos National Laboratory, Idaho National Laboratory, and Oak Ridge National Laboratory
- Maintain capability for receipt and disposal for up to 21 shipments per week of contact-handled and remote-handled TRU for 41 weeks

## Special Nuclear Material Consolidation, Processing, and Disposition

\$4,977 (+\$132)

CB-0020

- Continue safeguard and security activities



Support EM goal to dispose of 90% of legacy TRU by 2015



# Portsmouth

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Non-Defense Environmental Cleanup	48,148	49,352	1,204
Uranium Enrichment D&D	189,967	93,613	(96,354)
Subtotal, Portsmouth	238,115	142,965	(95,150)
Safeguard and Security	17,912	8,578	(9,334)
<b>Total, Portsmouth</b>	<b>256,027</b>	<b>151,543</b>	<b>(104,484)</b>

## Excess Facilities Deactivation and Decommissioning

\$91,818 (-\$90,455)

PO-0040

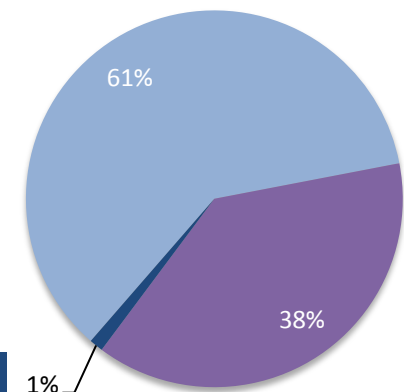
- Continue removal of Building X-326 process equipment
- Conduct characterization, treatment, and disposition of waste associated with deactivation and decommissioning
- Initiate On-Site Waste Disposal Cell construction, if selected

## Special Nuclear Material Consolidation, Processing, and Disposition

\$57,930 (\$-8,130)

PO-0011X  
PO-0020

- Operate Depleted Uranium Hexafluoride (DUF<sub>6</sub>) conversion facility and package depleted uranium for reuse or disposition
- Continue safeguard and security activities



Note: FY 2014 assumes \$200M uranium transfer

# Paducah

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Non-Defense Environmental Cleanup	52,290	46,870	(5,420)
Uranium Enrichment D&D	81,357	265,220	183,863
Subtotal, Paducah	133,647	312,090	178,443
Safeguard and Security	7,935	9,435	1,500
<b>Total, Paducah</b>	<b>141,582</b>	<b>321,525</b>	<b>179,943</b>

## Excess Facilities Deactivation and Decommissioning

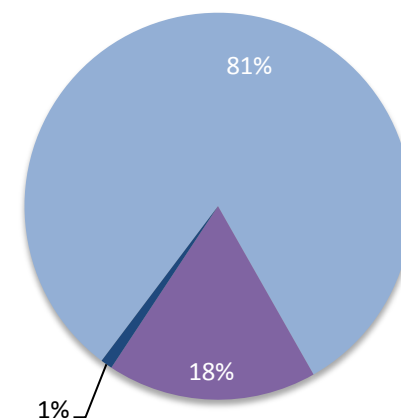
\$262,057 (+\$191,392)

- PA-0040
- Complete demolition of the 200,000 square foot C-410 Feed Plant
  - Operate the treatment systems intended to remove Trichloroethylene at the site's single largest source of groundwater contamination
  - Characterize, treat and dispose of newly-generated waste
  - Initiate the transition of the Gaseous Diffusion Plant from the United States Enrichment Corporation to the Department of Energy

## Special Nuclear Material Consolidation, Processing, and Disposition

\$56,305 (-\$3,920)

- PA-0011  
PA-0011X  
PA-0020
- Continue to maintain cleanup, sampling, decontamination and field activities associated with the polychlorinated biphenyls
  - Operate Depleted Uranium Hexafluoride (DUF<sub>6</sub>) conversion facility and package depleted uranium for reuse or disposition
  - Continue safeguard and security activities



Site Infrastructure / Program Support  
(Community and Regulatory activities) -  
\$3,163

# West Valley

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Non-Defense Environmental Cleanup	64,735	64,000	(735)
Subtotal, West Valley	64,735	64,000	(735)
Safeguard and Security	1,565	2,015	450
<b>Total, West Valley</b>	<b>66,300</b>	<b>66,015</b>	<b>(285)</b>

## Excess Facilities Deactivation and Decommissioning

\$51,200 (+\$887)

OH-WV-0040

- Continue deactivation of Main Plant Processing Building
- Complete installation of the High Level Waste Interim Storage System pad
- Initiate relocation of 275 High-Level Waste Canisters to a new on-site storage system
- Complete alterations in the Main Plant Process Buildings for canister relocation

## Transuranic and Mixed / Low-Level Waste Disposition

\$12,800 (-\$1,622)

OH-WV-0013

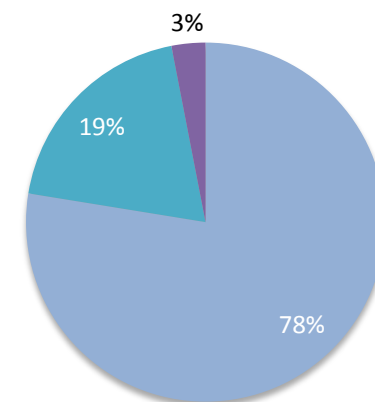
- Continue processing and storage of legacy and remediation transuranic waste; continue processing and disposal of legacy and remediation low-level waste
- Continue processing and disposal of legacy mixed low-level waste in compliance with the Site Treatment Plan
- Initiate planning for shipment of WIR components (melter, 2 tank vessels)

## Special Nuclear Material Consolidation, Processing, and Disposition

\$2,015 (+\$450)

OH-WV-0020

- Continue safeguard and security activities



# Small Sites

Site	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Brookhaven	12,535	0	(12,535)
SLAC	2,935	0	(2,935)
Energy Technology Engineering Center (ETEC)	6,279	9,411	3,132
Moab	30,625	35,778	5,153
<b>Total, Small Sites</b>	<b>52,374</b>	<b>45,189</b>	<b>(7,185)</b>

## Moab

### Soil and Groundwater Remediation

\$35,778 (+\$5,153)

CBC-MOAB-0031

- Continue operation of interim remedial action for contaminated groundwater
- Continue tailings excavation and transport from millsite to the disposal cell
- Continue to place tailings in the disposal cell

## ETEC

### Excess Facilities Deactivation and Decommissioning

\$9,411 (+\$3,132)

CBC-ETEC-0040

- Perform soil and groundwater characterization
- Perform Resource Conservation and Recovery Act facility investigation program for soil and groundwater
- Issue draft Environmental Impact Statement for review and public comment

## Brookhaven

### Soil and Groundwater Remediation

\$0 (-\$12,535)

BRNL-0030

- Transfer to Office of Science in 2014

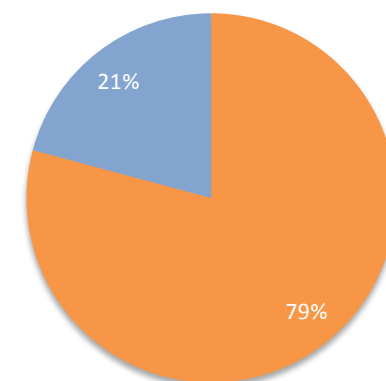
## SLAC

### Soil and Groundwater Remediation

\$0 (-\$2,935)

CBC-SLAC-0030

- Transfer to Office of Science in 2014





# Los Alamos

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	188,161	219,789	31,628

## Soil and Groundwater Remediation

\$116,124 (-\$5,153)

VL-LANL-  
0030

- Continue groundwater and remediation activities
- Continue investigation and characterization of technical areas within the Canon de Valle Project

## Transuranic and Mixed/Low-Level Waste Disposition

\$90,000 (+\$25,677)

VL-LANL-  
0013

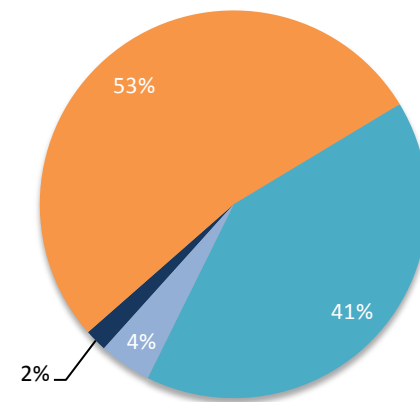
- Continue operation of new oversize modular box line and disposition of excess materials and transuranic waste
- Continue disposition of mixed low-level waste / low-level waste
- Supports progress towards complete processing and removal of 3,706 m<sup>3</sup> of above-ground transuranic waste

## Excess Facilities Deactivation and Decommissioning

\$9,562 (+\$9,562)

VL-LANL-  
0040-D

- Support decontamination, decommissioning and demolition activities for process-contaminated facilities at Technical Area-21 which are co-located in the footprint of the structures



Site Infrastructure / Program Support  
(Community and Regulatory activities) -  
\$4,103

# NNSA Sites

Site	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Nevada	65,145	61,897	(3,248)
SPRU	23,700	23,700	0
Sandia	2,814	2,814	0
Lawrence Livermore	2,173	1,476	(697)
<b>Total, NNSA Sites</b>	<b>93,832</b>	<b>89,887</b>	<b>(3,945)</b>

## Nevada

### Soil and Groundwater Remediation

\$41,826 (-\$8,775)

VL-NV-0030

- Continue risk-based remediation of contaminated soils, and groundwater activities

### Transuranic and Mixed/Low-Level Waste Disposition

\$16,578 (+\$5,834)

VL-NV-0080

- Continue to support complex-wide cleanup activities by receiving and disposing of approximately 34,000 m<sup>3</sup> of low-level and mixed low-level radioactive waste
- Excavate new low-level waste disposal cells as required
- Operate the Resource Conservation and Recovery Act mixed low-level waste disposal cell
- Continue receiving and disposing of shipments of Consolidated Edison Uranium Solidification Project material from the uranium-233 inventory at Oak Ridge

## SPRU

### Excess Facilities Deactivation and Decommissioning

\$23,700 (+\$0)

VL-SPRU-0040

- Continue planned decontamination and decommissioning activities at H2 and G2 buildings

## Sandia

### Soil and Groundwater Remediation

\$2,814 (+\$0)

VL-SN-0030

- Complete compliance requirements for groundwater characterization and remediation for the New Mexico Environmental Department

## Lawrence Livermore

### Soil and Groundwater Remediation

\$1,238 (-\$697)

VL-LLNL-0031

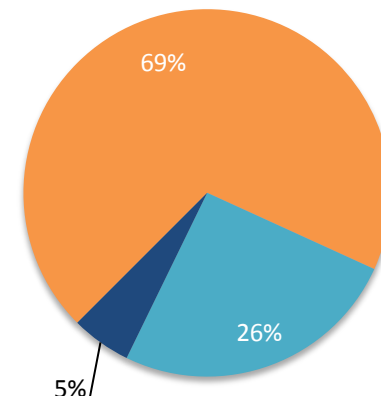
- Continue treatability study for Enhanced In-Situ Bioremediation of Groundwater at Building 850/Operable Unit 5

### Transuranic and Mixed/Low-Level Waste Disposition

\$238 (+\$0)

VL-FOO-0013B-D

- Continue support to Site 300 Environmental Restoration Project and Grants



Site Infrastructure / Program Support  
(Community and Regulatory activities) -  
\$3,493

# Program Direction / Program Support

## Program Direction

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	321,628	280,784	(40,844)

### Site Infrastructure/Support/Program Management

\$280,784 (-\$40,844)

HQ-PD-0100

- Support Salary & benefit and travel requirements for 1,398 federal FTEs: \$216M (Reduction of -\$21M and 127 FTEs from FY 2012)
- Expanded reliance on Federal staff in fulfilling EM roles and mission

#### Major Program Direction Activities:

- ✓ Salaries & Benefits and Travel \$216.0M (- \$21.1M)
- ✓ Support Services \$ 24.9M (- \$11.7M)
- ✓ Other Services \$ 25.6M (-\$11.1M)
  - o Rent, utilities, essential infrastructure upkeep
- ✓ Working Capital Fund \$ 14.1M (+\$3.0M)

## Program Support

Appropriation	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	20,380	17,979	(2,401)

### Site Infrastructure/Support/Program Management

\$17,979 (-\$2,401)

HQ-MS-0100  
EM-HBCU-0100

- Support environmental impact statement activities, pathway for disposition waste and materials, transportation, packaging, and emergency preparedness activities, legal claims and closure assistance activities, and communication with the public and stakeholders
- Support implementation of the Minority Serving Institutional Partnership Program to attract, develop, and retain a technical workforce for Department national laboratories and production plants

# Headquarters Technology Development & Deployment

Site	FY 2012 Current	FY 2014 Cong. Request	FY 2014 vs. FY 2012 Current
Defense Environmental Cleanup	10,622	20,000	9,378

- EM will continue coordination with the Office of Science to leverage investments in research and utilize their expertise to address EM issues
- EM is proposing to enhance its Technology Development efforts in FY 2014, with a coordinated, two-pronged approach where select activities will be managed at HQ while others will be managed at the field sites
  - Long term technology development activities with lower maturity levels are to be managed at headquarters.
  - Short term technology development activities with higher maturity levels are to be managed at the sites.

## Site Infrastructure/Support/Program Management (HQ-TD-0100)

\$20,000 (+\$9,378)

- Conduct scientific research and development activities to provide the technical basis for supplemental low activity immobilization waste for and to provide a solution for the separation of Technicium-99 from the low activity waste
- Continue development of supplemental salt processing technology augmenting the Salt Waste Processing Facility capability and the Hanford tank waste system
- Test cleanup scenarios at key DOE sites through the use of Advanced Simulation Capabilities for Environmental Management as part of the End States Initiative
- Continue development and testing of innovative embedded sensors and long-term monitoring technologies for In-Situ Decommissioning

*Technologies that are used by Environmental Management to complete our mission are developed via a multi-partner, public/private development pipeline*



Solvent Extraction Technology Developed from Decades of DOE Investment, Partnerships, and On-going Applied Research